

### REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Proposed changes to Figs. 6 and 7 are submitted herewith to correct the misspelling of "sum" in blocks 603 and 605.

Claims 17-19 have been amended to overcome the objections thereto.

The features of claim 14 have been integrated into base claim 13, and claim 14 has been cancelled. Base claim 21 has been revised in a manner similar to that for apparatus claim 13, but with respect to a method. Claims 16 and 20 have been amended for clarity, and claims 23 and 24 newly added. Support for the features recited in claims 23 and 24 is provided in paragraph [0109] of the specification.

Claims 13-22 were rejected, under 35 USC §102(b), as being anticipated by Mizuno et al. (US 5,732,392). To the extent the rejections may be deemed applicable to the amended claims, Applicant respectfully traverses.

Claim 13 now recites:

*A mode determining apparatus comprising:  
a detector that detects changes in each order  
component of a quantized LSP parameter in a  
predetermined period; and  
a mode determiner that determines that the  
predetermined period indicates a speech mode when the*

*detector detects a change greater than a predetermined level in relation to at least one order component.*

Mizuno fails to disclose the features recited in claim 13 of: (1) detecting changes in each order component of a quantized LSP parameter and (2) determining the indication of a speech mode when the detected change for at least one order component exceeds a predetermined level. As may be determined by examination of column 5, lines 23-65, Mizuno does not disclose detecting changes in individual order components of a quantized LSP parameter. Instead, Mizuno's analysis of an input signal appears to consider only the combined effect of all order components of a k-dimensional LPC cepstrum  $C(t) = \{c_1, c_2, \dots, c_k\}$  upon the dynamic measure,  $D(t)$ , representing the magnitude of spectrum variation (see Mizuno col. 5, lines 24-25 and 56-60). And the singular dynamic measure  $D(t)$ , reflecting the entire k-dimensional LPC cepstrum, alone is compared to a threshold to determine whether a speech mode is indicated.

Accordingly, Applicant submits that Mizuno does not anticipate the subject matter defined by claim 13. More specifically, Mizuno does not disclose the features recited in claim 13 of detecting changes in each order component of a quantized LSP parameter and using each of the detected changes to determine whether a speech mode is indicated. Claim 21 similarly

recites the above-mentioned features distinguishing apparatus claim 13 from Mizuno, but with respect to a method. Therefore, allowance of claims 13 and 21 and dependent claim 23 is warranted.

Claim 15 recites calculating the difference between each of a plurality of order components of a quantized LSP parameter and a corresponding order component of the average quantized LSP parameter and then using the calculated differences to determine whether a speech mode is indicated. As discussed in connection with claim 13, Mizuno does not disclose evaluating individual orders of a quantized LSP parameter. Instead, Mizuno evaluates only the combined effect of all orders of a quantized LSP parameter (see Mizuno col. 4, lines 4-10 and 17-20). For reasons similar to those discussed in connection with claim 13, then, Mizuno fails to disclose calculating the difference between each of a plurality of order components of a quantized LSP parameter and a corresponding order component of the average quantized LSP parameter and then using the calculated differences to determine whether a speech mode is indicated.

Accordingly, Mizuno does not anticipate the subject matter defined by claim 15. Claim 22 similarly recites the above-mentioned features distinguishing apparatus claim 15 from Mizuno,

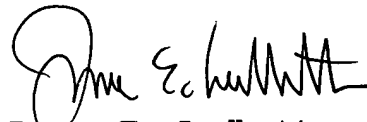
but with respect to a method. Therefore, allowance of claims 15 and 22 and all claims dependent therefrom is warranted.

Dependent claim 16 is also allowable for the independent reason that it recites two-step mode determination functionality, which further distinguishes this claim from Mizuno's disclosure.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



James E. Ledbetter  
Registration No. 28,732

Date: January 4, 2006  
JEL/DWW/att

Attorney Docket No. L9289.01180  
STEVENS DAVIS, MILLER & MOSHER, L.L.P.  
1615 L Street, N.W., Suite 850  
P.O. Box 34387  
Washington, D.C. 20043-4387  
Telephone: (202) 785-0100  
Facsimile: (202) 408-5200

IN THE DRAWINGS

Proposed changes to Figs. 6 and 7 are submitted herewith,  
with a Letter to the Official Draftsman.

